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**PROJECT MEMORANDUM  
SCE SONGS PROJECT**

**To:** Jensen Uchida, Project Manager, CPUC  
**From:** Vida Strong, Aspen Project Manager  
**Date:** March 4, 2009  
**Subject:** Status Report #2, January 20–February 16, 2009

The SCE SONGS Project involves the following activities:

- Preparation of transport route through Marine Corps Base, Camp Pendleton (MCBCP)
- Ocean transport of the Replacement Steam Generators (RSGs) from the Port of L.A. to MCBCP
- Onshore transport of the RSGs to the SONGS facility
- Installation of four RSGs into the SONGS facility

**CPUC/Aspen Environmental Monitors (EM):** Jenny Slaughter

**Summary of Activity:**

During the subject period, the onshore transport of the two Replacement Steam Generators (RSGs) from the Del Mar Boat Basin to the SONGS facility, covered under the CPUC Notice to Proceed for the SONGS project, took place. The installation of the RSGs into their positions inside Unit 2 will take place during an outage in the fall of 2009.

The transport route for the RSGs approved for the project is the beach and road route, which is entirely west of Interstate 5 except for a short stretch along Interstate 5 to bypass Skull Canyon, and is entirely within the MCBCP except a portion along Old Highway 101 through San Onofre State Park.

Transport of the two RSGs was conducted one at a time using a tracked crawler for the beach route portion up to the Las Pulgas staging area and then transferred to the Goldhofer trailer for the remainder of the route along both paved and dirt roads into SONGS.

1. Transport of the first RSG began on January 20<sup>th</sup> successfully crossing the Santa Margarita River (see Figure 1), and continued to the first layover area for overnight staging. The beach transport was conducted during low tides to stay below the mean high tide line. A grader and a bulldozer were ahead of the crawler creating a smooth, even driving surface for the crawler along the beach (see Figure 2). Transport of the first RSG along the beach route was completed in five days, using three beach layover areas for overnight staging (see Figure 3). Additional grading equipment was brought in to assist in the beach grading ahead of the crawler.
2. In preparation for the remainder of the transport route, steel plates were placed at the entrance and exit of Interstate 5, at the Y-turn on MCBCP, and along portions of Old Highway 101 for pavement and utility protection.
3. Once the RSG was transported to the Las Pulgas staging area, it was transferred to the Goldhofer and prepared for road transport. Transport from Las Pulgas to the SONGS facility on the Goldhofer began on January 28<sup>th</sup>. Transport along the southbound lanes of Interstate 5 took place the night of the 28<sup>th</sup> and took approximately one hour to complete the ½ mile of freeway transport (see Figure 4). Cal Trans and California Highway Patrol were onsite to assist with the move and oversee traffic control operations. One lane of southbound traffic was open during the closure. The remainder of the



transport route along dirt roads on MCBCP and on paved roads (old Highway 101 and through the San Onofre State Park) was completed on January 30<sup>th</sup> (see Figure 5). Minor grading was necessary to improve the dirt access roads on MCBCP due to heavy military equipment conducting training exercises on the same roads.

4. On January 26<sup>th</sup>, the crawler was driven back to the Del Mar Boat Basin along the same beach route to load the second RSG and prepare for the second transport. The return trip of the crawler was completed in two days, staging one night at a layover area and crossing the Santa Margarita River at low flows and low tide. Once the Goldhofer offloaded the first RSG into the SONGS staging area, it was driven back to the Las Pulgas staging area to prepare for the second RSG transport.
5. Transport of the second RSG began on February 4<sup>th</sup> and completed the Santa Margarita River crossing at low flows and during low tide. Progress of the beach route transport was faster for the second RSG and only minor grading along the beach was conducted. The second RSG completed the beach portion in three days and offloaded the RSG onto the Goldhofer at the Las Pulgas staging area.
6. Transport of the second RSG along Interstate 5 and through MCBCP and San Onofre State Park was completed between February 11<sup>th</sup> and 13<sup>th</sup>.
7. Transport equipment and materials were demobilized from the Las Pulgas Staging area, Del Mar Boat Basin, and the SONGS facility.

#### **Environmental Compliance:**

1. A pre-transport weather analysis was submitted to the CPUC describing the tidal conditions and the flow analysis of the Santa Margarita River crossing prior to each RSG transport.
2. On site biological monitoring was conducted by SCE's consultant. The biological monitors were present during route improvements and all RSG transport activities. Fisheries biologists were present to survey and monitor the Santa Margarita River crossing prior to and during RSG transport over this crossing to survey for tidewater gobies, a federally protected fish potentially present in the river estuary. The fisheries biologists conducted seining of the Santa Margarita River along the beach transport route, and did not identify any tidewater gobies. Along the beach transport, the monitoring biologists identified several Western snowy plovers. Due to the slow speed of the crawler (0.2–0.6 miles per hour), the birds could easily avoid the equipment.
3. The CPUC EM verified that the beach route and layover areas were clearly marked in advance of transport. Flagging was used to delineate the mean high tide line and layover areas. Transport along the beach route was conducted during low tides in order to stay below the mean high tide line and avoid vegetation and bird nesting areas. Three layover areas were marked for overnight staging along the beach route above the mean high tide line. These areas were identified ahead of time by biologists and were located in areas recommended by the United States Fish and Wildlife Service (USFWS) and MCBCP biologists. The layover areas were chosen in locations with little or no vegetation and were located outside of known bird nesting areas.
4. SCE Hazardous Materials personnel and equipment were present during all transport activities.
5. Along the beach transport route, refueling of grading equipment took place off the beach at the staging areas.
6. A fuel spill took place while refueling the crawler at the base of the access road to the Las Pulgas staging area on January 24<sup>th</sup>. Approximately 5-15 drops of diesel fuel were observed on the sand beyond the containment tarps used during refueling. SCE's Haz Mat team removed the contaminated soil for disposal.

7. A 5-gallon hydraulic spill from the Goldhofer trailer was observed on January 24<sup>th</sup> while the trailer was mobilizing into position for RSG transfer at the Las Pulgas staging area. The approximate 60-square-foot affected area was removed by SCE Haz Mat crews and removed from the site (see Figure 6). The spill was within the criteria for a Tier 1 event and as a result, notifications were made to MCBCP.
8. A 10-gallon hydraulic spill from the Goldhofer occurred on January 27<sup>th</sup> at the Las Pulgas staging area as the RSG was being driven into position for the Interstate 5 entrance area. The affected area was removed by SCE's Haz Mat team and removed from the site. The spill was within the criteria for a Tier 1 event and as a result, notifications were made to MCBCP.
9. Transport permits for the Interstate 5 closure and the CHP inspection report were submitted prior to the freeway transport.
10. Bike path closure notices were posted at the entrance of San Onofre State Park and the Las Pulgas exit during RSG transport through this section. Bicyclists were diverted to Interstate 5 during the RSG transport through this area.

No Non-Compliance Reports (NCR) or Project Memoranda were issued during the subject period.

## SONGS PROJECT PHOTOGRAPHS



**Figure 1:** RSG on the crawler crossing the Santa Margarita River along the beach route on MCBCP.



**Figure 2:** The beach route was prepared using graders and bulldozers below the mean high tide line to create an even driving surface for the crawler.



**Figure 3:** The RSG at a layover area above the mean high tide line along the beach route. The RSG was staged overnight in the layover areas and resumed transport during the next low tide.



**Figure 4:** RSG transport along Interstate 5 on the Goldhofer. Steel plates were used to protect curbs and pavement.





**Figure 5:** Transport of the RSG on the Goldhofer through San Onofre State Park.



**Figure 6:** SCE Haz Mat crews responded to a hydraulic spill from the Goldhofer at the Las Pulgas staging area.